

ABSTRACT OF THE DISCLOSURE

A process for producing an artificial bone model in accordance with the selective laser sintering process which comprises extending a powder material for sintering comprising 30 to 90 parts by weight of powder of a synthetic resin and 10 to 70% by weight of an inorganic filler to form a thin layer and irradiating a portion of the thin layer having the shape formed based on tomographic information of a natural bone with laser light so that the irradiated portion of the thin layer is sintered. The extension of the powder material for sintering to form the thin layer and the irradiation of the thin layer with laser light for sintering are conducted repeatedly. The artificial bone model can three-dimensionally reproduce steric shapes of natural bones such as bones in the human body precisely and accurately and exhibits the property for cutting closely similar to that of natural bones. The artificial bone model can be used for educational training or for studying a plan for curing before a surgical operation.